

# Notice of Allowability

Application No.

09/671,636

Examiner

Sudhanshu C. Pathak

Applicant(s)

DRESS ET AL.

Art Unit

2611

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to February 21<sup>st</sup>, 2006.
2. ☒ The allowed claim(s) is/are 1-11, 15, 25-26 & 28-49 and re-numbered as claims 1-to-35 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-11, 15, 25-26 & 28-49 are pending in the application.
2. Claims 12-14, 16-24 & 27 have been canceled.

### EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Bruckner on May 4<sup>th</sup>, 2006.

- In order to avoid a 112 2<sup>nd</sup>, Paragraph Rejection, the claims have been amended in the following manner:
  - In Claim 1, line 7 **replace**  
"wherein two of the of plurality" **with**  
.....wherein the product of two of the plurality.....
  - In Claim 1, line 9 **replace**  
"is a data rate" **with**  
.....the bit rate.....
  - In Claim 1, line 9 **replace**  
"orthogonally" **with**  
.....orthogonality.....
  - In Claim 15, lines 8 **replace**

"wherein two of the of plurality" **with**

.....wherein the product of two of the plurality.....

- In Claim 15, line 10 **replace**

"is a data rate" **with**

.....the bit rate.....

- In Claim 15, line 1 **replace**

"A computer program comprising" **with**

.....A computer program stored on a computer readable medium  
comprising.....

- In Claim 15, line 10 **replace**

"orthogonally" **with**

.....orthogonality.....

- In Claim 25, line 7 **replace**

"wherein two of the of plurality" **with**

.....wherein the product of two of the plurality.....

- In Claim 25, line 9 **replace**

"is a data rate" **with**

.....the bit rate.....

- In Claim 25, line 1 **replace**

"A computer program comprising" **with**

.....A computer program stored on a computer readable medium  
comprising.....

- In Claim 25, line 9 **replace**  
“orthogonally” **with**  
.....orthogonality.....
- Cancel Claim 26
- In Claim 28, line 9 **replace**  
“wherein two of the of plurality” **with**  
.....wherein the product of two of the plurality.....
- In Claim 28, line 11 **replace**  
“is a data rate” **with**  
.....the bit rate.....
- In Claim 28, line 11 **replace**  
“orthogonally” **with**  
.....orthogonality.....
- In Claim 32, line 8 **replace**  
“wherein two of the of plurality” **with**  
.....wherein the product of two of the plurality.....
- In Claim 32, line 10 **replace**  
“is a data rate” **with**  
.....the bit rate.....
- In Claim 32, line 10 **replace**  
“orthogonally” **with**  
.....orthogonality.....

- In Claim 34, line 8 **replace**  
“wherein two of the of plurality” **with**  
.....wherein the product of two of the plurality.....
- In Claim 34, line 10 **replace**  
“is a data rate” **with**  
.....the bit rate.....
- In Claim 34, line 10 **replace**  
“orthogonally” **with**  
.....orthogonality.....
- In Claim 34, line 4 **replace**  
“counting number” **with**  
.....counting number and an integer.....

***Allowable Subject Matter***

4. Claims 1-11, 15, 25-26 & 28-49 and re-numbered as claims 1-to-35 respectively are allowed.
5. Claims 1-11, 15, 25-26 & 28-49 and re-numbered as claims 1-to-35 respectively are allowable over the prior art of record because the cited references do not contain the specified limitation of a method, comprising overlapping a plurality of direct- sequence spread-spectrum signals using carrier frequencies that are i) each precisely an integer multiple of a bit rate and ii) orthogonally spaced relative to an integral multiple of the bit rate rather than a chip rate, wherein the chip rate is an integer multiple of the bit rate and is greater than or equal to two and

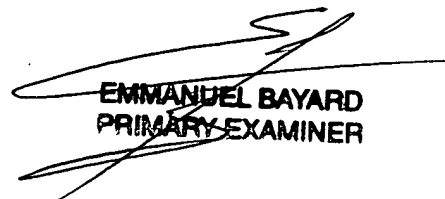
wherein the product of two of the plurality of direct-sequence spread-spectrum signals, independent of their relative starting phases, will integrate to zero and an integration time to define orthogonality is  $1/T_b$ , where  $1/T_b$  is the bit rate.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571)-272-3042
- The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sudhanshu C. Pathak

  
EMMANUEL BAYARD  
PRIMARY EXAMINER